INDEX TO VOLUMES I AND II.

(An * signifies that articles are referred to by title only.)

Abbe, Cleveland.	*Climate of Samoa	I	272
	*Expedition to the West Coast of Africa	II	295
Across Nicaragua with transit and machéte (*Peary*)		I	272, 315
Africa.	Exhibition of West Coast of	II	295
	its past and future (*Hubbard*)	I	99
	slave trade in	I	112
Alaska,	Arctic cruise of the Thetis in 1889	II	171
	A trip up the Yukon river (*Russell*)	II	67
America.	International literary contest to be held on the 4th centennial anniversary, etc.	I	273
Announcement		I i., II	287
d'Anville's references to Bering's voyage of 1725–30		II	125
Appalachian mountain drainage		I	183
Arctic cruise of the Thetis in 1889		II	68, 171
*Armenia, Turkish Rule in		II	290
Asheville, (N. C.), round about (*Willis*)		I	271, 291
*Asia, its past and present (*Hubbard*)		II	68
Atlantic coast storm of March 11–14, 1888	(*Greely*)	I	37
	(*Hayden*)	I	40
*Atlantic, Icebergs and Field ice in		II	291
	Law of storms considered with special reference to the north Atlantic (*Hayden*)	II	199
Baker, Marcus.	*Surveys, their kinds and purposes	I	269
	Alleged observation of a lunar eclipse by Bering in 1728–29	II	167
	Geographic nomenclature	II	272, 290
Bartlett, J. R.	*Physical geography of the sea	I	87
Bell, A. G.	*The Krakatoa eruption	I	272, 290
Bering, Vitus.	His first expedition, 1725–30, with translation of his original report (*Dall*)	II	111
	Determination of longitude by the moon and by eclipses	II	113
	Instruments and methods during his first expedition of 1725–30	II	113
	Lunar eclipse said to have been observed by him in 1728–29	II	114, 167
	Sources of information relating to his voyage of 1725–30	II	118
	Instructions from Peter the Great, relating to his expedition of 1725–30	II	135
	Original report on his expedition to the eastern coast of Siberia	II	135
	Geographical positions recorded by Bering, 1725–30	II	144, 160
	Itinerary of his expedition of 1725–30	II	145
	Synopsis of his first voyage	II	146
	Resumé of the results of his first voyage	II	162
Bernadou, J. B.	Korea and the Koreans, with map	II	231, 291
Bigelow, F. H.	*Expedition to the West Coast of Africa	II	295
Biology in its relations to the work of the National Geographic Society (*Merriam*)		I	160
Brazilian coast, telegraphic longitude determinations		II	17
Bureau of Navigation.	Telegraphic determinations of longitude	II	1
Cadastre defined		II	246
California, irrigation in		I	270, 277
	*north winds of (*Gilbert*)	I	88
Cambrian.	*The Continent during the	II	295
*Canada, the great plains of (*Kenaston*)		I	270
*Canton, a glimpse of Chinese life in		II	68
Central American interoceanic canal routes		I	301
	telegraphic longitude determinations	II	22
Charts illustrating the storm of March 11–14, 1888, on the Atlantic coast		I	58
Chatelaine, Heli.	*Expedition to the West Coast of Africa	II	295
China, Japan and East Indies, telegraphic longitude determinations in.		II	21

*China, and Thibet, Journey in ..... II 291
*Chinese life in Canton (*Hitchcock*) ..... II 68
Classification of geographic forms ..... I 30, 36
by genesis ..... I 27, 88
of rivers (*Davis*) ..... II 81
*of topographic forms (*Gilbert*) ..... I 88
Coast survey of the United States ..... I 59
Contour and hachure drawing, examples of ..... I 268
Curtis, W. E. *Patagonia ..... I 87
*Recent events in the United States of Colombia ..... I 272

Dall, W. H. Critical review of Bering's first expedition 1725-30 ..... II 68, 111
Darien, a trip to Panama and ..... I 301
Davis, W. M. Geographic methods in geologic investigation ..... I 11, 88
Rivers and valleys of Pennsylvania ..... I 183, 271
Rivers of northern New Jersey with notes on the general classification of rivers ..... II 68, 81
Topographic models ..... I 271
Drainage of Pennsylvania (*Davis*) ..... I 183
of northern New Jersey ..... II 81
systems classified ..... I 35
Depths of oceans ..... I 149
DuHalde's references to Bering's voyage of 1725-30 ..... II 118
Dutton C. E. *The Hawaiian Islands ..... II 295
Dyer, G. L. Geography of the sea—a report of progress ..... I 136

East Indies, China and Japan, telegraphic longitude determinations ..... II 21
Eclipse of the moon said to have been observed by Bering in his expedition of 1725-30 ..... II 114, 167
Ellicott J. M. *Surveys Executed by the U. S. S. Ranger in Lower California ..... II 293
English-Russian transliteration ..... II 285
Eskimos of Point Hope, Alaska, traditions of ..... II 195
Exploration of Mt. St. Elias ..... II 288

Finley, J. P. *Something about tornadoes ..... I 269
French Broad valley (N. C.) ..... I 291

Gannett, Henry. *Physical statistics relating to Massachusetts ..... I 269
The survey and map of Massachusetts ..... I 78, 88
Garabed H. Discussion on Turkish Rule in Armenia ..... II 290
*Gas and Oil in the United States ..... II 295
Genesis of geographic forms as a means of classification ..... I 27
Geodetic survey of the United States ..... I 69
Geographic forms classified by genesis ..... I 27, 30
knowledge, historical sketch by *G. G. Hubbard* ..... I 3
methods in geologic investigation (*Davis*) ..... I 11, 88
names, rules for orthography of ..... II 279
nomenclature ..... II 261, 290
*triangulation (*Johnson*) ..... I 88
Geographical positions determined by Bering during his voyage, 1725-30 II 144, 160
Geography of the air—a report of progress (*Greely*) ..... I 151; II 49, 68
of the land—a report of progress (*Ogden*) ..... I 125; II 31
of life—a report of progress (*Merriam*) ..... I 160
of the sea—a report of progress (*Dyer*) ..... I 136
systematic ..... I 11, 27
Geologic investigation by geographic methods (*Davis*) ..... I 11
processes classified ..... I 30
Geological history of Pennsylvania ..... I 183
Geomorphology ..... I 27
Gilbert, G. K. *Classification of topographic forms ..... I 88
*North winds of California ..... I 88
Goode, R. U. A trip to Panamá and Darien ..... I 271, 301
Great Britain, Ordnance Survey, its history and object ..... II 243, 292
Greely, A. W. Geography of the air—a report of progress ..... I 151; II 49,68, 295
The great storm of March 11-14, 1888 ..... I 37, 88
Green river in the Uinta mountains, its development (*Powell*) ..... II 100

Hachure and contour drawing, examples of ..... I 268
Hall, W. H. Irrigation in California ..... I 270, 277
Harris' references to Bering's voyage of 1725-30 ..... II 121
*Hawaiian Islands ..... II 295
Hayden, E. Law of storms considered with special reference to the north Atlantic ..... II 67, 199
The great storm off the Atlantic coast March 11-14, 1888 ..... I 40, 88
*Report on the Department of the Sea ..... II 294
*Samoa; general geography, hydrography ..... I 227
Herald Island, Arctic ocean, with plate ..... II 193

Herrle, Gustave. Geographic nomenclature ..... II 265, 290
Rules for the orthography of geographic names ..... II 279
Herschel island, Mackenzie bay ..... II 188
Hitchcock, Romyn. *A glimpse of Chinese life in Canton ..... II 68
*House life in Mexico (*Johnson*) ..... I 272
Hubbard, G. G. *Asia, its past and present ..... II 68
Africa, its past and future ..... I 99
Progress in geographic study. Introductory address I 3
*South America ..... II 293
Hurricanes off the Atlantic coast (*Hayden*) ..... II 199
of West India ..... II 203
of Nov. 25, 1888, with map ..... II 204
St. Thomas hurricane of Sept. 3-12, 1889 ..... II 205

*Icebergs and Field Ice in the North Atlantic ..... II 291
Imperial German Hydrographic office, rules for orthography of geographic names ..... II 282
International literary contest to be held at Madrid ..... I 273
simultaneous meteorological reports ..... I 155
Interoceanic canal routes of Central America ..... I 301
of Nicaragua ..... I 315
Introductory address by *G. G. Hubbard* ..... II 3
Irrigation in California (*Hall*) ..... I 270, 277
problem in Montana (*Wilson*) ..... II 67, 212

Japan, China and East Indies. Telegraphic longitude determinations.. II 21
Johnson, A. B. *House life in Mexico ..... I 272
Johnson, W. D. *Geographic triangulation ..... I 88

Kamchatka, Bering's voyage to ..... II 114
Eclipse of the moon said to have been observed there by Bering 1728-29 ..... II 114, 167
Geographical positions determined by Bering, 1725-30 ..... II 144, 160
Kenaston, C. A. *The great plains of Canada ..... I 270
Kerr, Mark B. *Survey of Mason and Dixon's line ..... I 271
*Surveys about Mt. St. Elias ..... II 293
Klemm, L. R. *A New Method of Developing Geographic Facts and Teaching ..... II 290
Korea and the Koreans, with map (*Bernadou*) ..... II 231, 291
*Krakatoa eruption (*Bell*) ..... I 272

Law of storms (*Hayden*) ..... II 199
Lectures under the Auspices of the National Geographic Society ..... II 289
Leon cathedral Nicaragua, colored plate ..... I 318
Literary contest, international, to be held at Madrid, Spain ..... I 273
Longitude determinations by telegraph in China, Japan and East Indies II 21
in the West Indies ..... II 5
on the east coast of South America ..... II 17
by Bureau of Navigation ..... II 1
determined by the moon by Bering ..... II 113
Loring, G. B. *The Kingdom of Portugal ..... II 295
*Lower California, Surveys in ..... II 293
Lunar eclipse said to have been observed by Bering in 1728-29 (*Baker*) .. II 114, 167

McGee, W J Classification of geographic forms by genesis ..... I 27, 88
Machéte, across Nicaragua with transit and ..... I 315
Managers, Standing Rules of the Board of ..... II 308
*Mason and Dixon's line, survey of (*Kerr*) ..... I 271
*Massachusetts, physical statistics relating to (*Gannett*) ..... I 269
survey and map of ..... I 78
Map making, scales for ..... II 251, 252
among the Koreans ..... II 231
and survey of Massachusetts ..... I 78
of the United States in relief (Plate) ..... I 268
showing topography about Asheville, N. C. ..... I 300
showing profile of Panama canal ..... I 314
showing sketch of Panama canal and railroad ..... I 314
Meade, R. W. Narrative of a cruise among the islands of Samoa ..... I 272
Merriam, C. H. Geography of life—a report of progress ..... I 160; II 294
Meteorological reports, international, simultaneous ..... I 155
Meteorology—See: Geography of the air, hurricanes and storm.
*Mexico, house life in (*Johnson*) ..... I 272
Mindeleff, Cosmos. Topographic models ..... I 254, 269
Mississippi river improvements ..... II 42
valley rainfall and river outflow ..... II 56
Montana, irrigation problem (*Wilson*) ..... II 212
resources, topography, climate, etc ..... II 212
Models, topographic ..... I 254

*Mongolia, China and Thibet, A Journey Through ..... II 291
Muller's references to Bering's voyage of 1725-30 ..... II 127
Mt. St. Elias, Expedition to ..... II 288, 293
Mt. St. Elias, Exploration of ..... II 297, 302

National Geographic Society:—
Organization and purpose ..... I 1, 3
Certificate of incorporation ..... I 89, 167
By-Laws ..... I 90, 169, 271, II 305
By-Laws, Amendment to ..... II 290, 294
National Geographic Magazine, its purpose, etc. ..... I 1
National Geographic Magazine, Change of Form of ..... II 287
Preparation of a physical atlas of the United States ..... I 1
Abstract of proceedings ..... I 87, 269; II 67, 290
Report of Recording Secretary ..... I 164; II 66, 296
Report of the Treasurer ..... I 163; II 64, 299
Rules Relating to Publication ..... II 311
Rules, Standing, of the Board of Managers ..... II 308
List of officers ..... I 93, 163, 270; II 68, 69, 315
List of members ..... I 94, 172; II 70, 316
National surveys ..... II 243
Newell, F. H. *Natural Gas and Oil in the Eastern United States ..... II 295
New Jersey. Drainage of northern New Jersey ..... II 81
Peneplains and pastplains ..... II 85
*The rivers of northern New Jersey (*Davis*) ..... II 68, 81
topography of ..... II 85
Nicaragua canal routes ..... I 315, 336
Norris, J. A. Telegraphic determinations of longitude by the Bureau of Navigation ..... II 1, 67
North Carolina. Topography about Asheville ..... I 291
*North winds of California (*Gilbert*) ..... I 88

Ocean depths ..... I 149
Oceanic circulation, present state of our knowledge ..... I 140
Officers, Election of ..... II 294
Ogden, H. G. Geography of the land—a report of progress ..... I 125; II 68, 295
Geographic nomenclature ..... II 261, 290
*The survey of the United States coast ..... I 59, 88
*Oil in the United States ..... II 295
Oil used to prevent heavy broken seas during storm of March 11-14, 1888 ..... I 55
Ordnance survey of Great Britain, its history and object (*Pierce*) ..... II 243, 292
Organization and purpose of the National Geographic Society ..... I 1, 3
Orthography of geographic names, rules for ..... II 279

Panama and Darien, a trip to (*Goode*) ..... I 271, 301
Canal Company, grant of land to ..... I 301
canal and railroad ..... I 309
Profile of canal ..... I 314
Pastplains and peneplains of New Jersey ..... II 85
*Patagonia. (*Curtis*) ..... I 87
Peary, R. E. Across Nicaragua with transit and machéte ..... I 272, 315
Pelly mountains, Alaska, non-existence of ..... II 184
Penck, Albrecht. On the development of rivers ..... II 108
Peneplains and pastplains of New Jersey ..... II 85
Pennsylvania rivers and valleys (*Davis*) ..... I 183, 271
Physical atlas of the United States, preparation of ..... I 1, 87
*Physical geography of the sea (*Bartlett*) ..... I 87
Physiography of the United States (*Powell*) ..... I 87
Pierce, Josiah. The Ordnance Survey of Great Britian, its history and object ..... II 243, 292
Plains, peneplains and pastplains of New Jersey ..... II 85, 89
*Portugal ..... II 295
Powell, J. W. Physiography of the United States ..... I 87
Development of the Green river in the Uinta mountains ..... II 100
Publication, Rules Relating to ..... II 311

Rainfall and river outflow ..... II 54
River outflow and rainfall ..... II 54
Rivers and valleys of Pennsylvania (*Davis*) ..... I 183, 271
of northern New Jersey (*Davis*) ..... II 68, 81
their development (*Davis*) ..... I 203; II 109
their general classification (*Davis*) ..... II 68, 81
Rockhill, W. W. *A Journey Through Mongolia, China and Thibet ..... II 291
Rodman, Hugh. *Icebergs and Field Ice in the North Atlantic ..... II 291
Royal Geographical Society of London, Rules for orthography of geographic names ..... II 279
Rules for the orthography of geographic names ..... II 279
Russell, I. C. *A trip up the Yukon river, Alaska ..... II 67
*Exploration of Mt. St. Elias ..... II 293
Russian-English transliteration ..... II 284

Safford, W. E. *Home life of the Samoans and the botany of the islands I 272
St. Thomas hurricane of Sept. 3-12, 1889, with plates II 205
*Samoa, its climate (*Abbe*) I 272
*narrative of a cruise among the islands of (*Meade*) I 272
*General geography and hydrography of the islands and adjacent seas (*Hayden*) I 272
*Samoans and the botany of the islands (*Safford*) I 272
San Juan river, colored plate showing entrance to the highlands I 315
Scales for map making II 251, 252
Siberian towns, etc., located by Bering, 1725-30 II 144, 160
Slave trade of Africa I 112
Société de Géographie of Paris, Rules for orthography of geographic names II 281
South America, telegraphic longitude determinations along the east coast of II 17
along the west coast of II 22
*Presidential Address II 293
Stein, Robert. *Turkish Rule in Armenia II 290
Stockton, C. H. The Arctic cruise of the Thetis, 1889, (with map) II 68, 171
Storm of March 11-14, 1888 (*Greely*) I 37, 88
(*Hayden*) I 40, 88
Stormpaths, geographical distribution I 156
Storms, law of (*Hayden*) II 67, 199
Survey of the (U. S.) coasts (*Ogden*) I 59, 88
and map of Massachusetts (*Gannett*) I 88
(Ordnance) of Great Britain, its history and object (*Pierce*) II 243
Surveys, national II 243
*their kinds and purposes (*Baker*) I 269
Systematic geography I 11, 27

Taku Glacier, Exhibition of Painting of II 293
Telegraphic determinations of longitude I 65; II 67
by the Bureau of Navigation II 1
in the West Indies II 5
along the east coast of South America II 17
in China, Japan and the East Indies II 21
Thetis, Arctic cruise of the Thetis, 1889 II 68, 171
*Thibet, Journey in II 291
Thompson, A. H. Geographic nomenclature II 277, 290
Topographic models (*Mindeleff*) I 254, 269, 271
Topography of Pennsylvania I 183
of Asheville, (N. C.), and vicinity I 291
of northern New Jersey II 85
*Tornadoes (*Finley*) I 269
Transliteration. Russian-English and English-Russian II 284, 285
Transit. Across Nicaragua with transit and machéte I 315
*Turkish Rule in Armenia II 290

U. S. Survey of the coasts I 59
*U. S. of Colombia, recent events in (*Curtiss*) I 272

Valleys and rivers of Pennsylvania (*Davis*) I 183

Walcott, C. D. *The North American Continent During the Cambrian II 295
West Indian hurricanes (*Hayden*) II 203
West Indies, telegraphic determinations of longitude II 5
Wilson, H. M. Irrigation problem in Montana II 67, 212
Willis, Bailey. Round about Asheville, N. C. I 271, 291

*Yukon river, Alaska (*Russell*) II 67